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*How are we preparing students through and for*

- networking and collaboration

# LEARNING TOGETHER: GROUP SUPPORT SESSIONS FOR PHARMACOLOGY AND THEIR EVALUATION

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## Background

Social constructivist learning theory highlights the value of peer-to-peer and collaborative learning opportunities in promoting enhanced participation and student-centred learning. The STIMulate program provides support for learning in the areas of maths, science and IT across QUT. Operating under a social justice framework, the program is unique in bringing together a team of experienced student volunteers and academic staff to facilitate the learning of any QUT coursework student regardless of campus or course.

Nursing students access STIMulate for assistance with both maths (drug calculations) and science (primarily bioscience) concepts. Whilst nursing students recognise that bioscience and pharmacology are important components of their course, many find these subjects challenging (reviewed in McVicar, Clancy, & Mayes, 2010). At QUT, pharmacology is studied by second-semester accelerated nursing students alongside fourth-semester traditional students.

## Intervention

In response to poor performance in pharmacology on the mid-semester exam in 2015, an intervention was conceived through consultation between the student cohort, the unit coordinator, and STIMulate. The intervention comprised weekly group support sessions led by a STIMulate academic, with three distinct components. Firstly, there was a conceptual overview of the bioscience, which was designed to provide the students with the background necessary to understand the pharmacology. Secondly, the group used the weekly online revision multiple choice questions (MCQs) to discuss the pharmacology content. Thirdly, the group developed online study resources using *Quizlet*, a website that enables users to generate and share study materials that can be accessed in a variety of different modes, including flashcards and games, to suit individual learning needs. This support aimed to equip students with effective study skills and strategies for dealing with the content, improve academic performance in the unit and normalise help-seeking behaviour.

## Results

Group support sessions for pharmacology were offered on an opt-in basis – students chose if and when they attended based on their availability and interest. Analysis of student achievement revealed students attending the support sessions performed as well as their peers on the final exam. Furthermore, evaluation of the group support sessions revealed the most valued elements of the format were the conceptual overview and the group discussion of MCQs.

## Conclusions

As a consequence of the success and evaluation of the intervention, it was decided to make the STIMulate sessions available from the start of the pharmacology unit in future years. This highlights the value of collaborative learning opportunities for students to enable them to not only be the recipients of the knowledge and learning, but also active participants in the process. To our knowledge, this is first time a structured learning facilitation model has been used to support

bioscience/pharmacology learning in the second half of a traditional nursing degree structure. Thus, this work raises for discussion the potential benefits of scaffolded support for learning throughout the degree to develop and reinforce active learning strategies.

## **References**

McVicar, A., Clancy, J., & Mayes, N. (2010). An exploratory study of the application of biosciences in practice, and implications for pre-qualifying education. *Nurse Education Today*, 30, 615-622.

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